

Appl. No. : 10/041,688
Filed : January 7, 2002

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A stable liquid adhesive for sealing a wound, the adhesive comprising a cyanoacrylate, a therapeutic agent comprising an antibiotic encapsulated in a microcapsule, and a defect forming agent, wherein the defect forming agent is capable of being removed from a cured cyanoacrylate matrix by solvation in an aqueous solution whereby a plurality of defects in the matrix are formed permitting release of the therapeutic agent from the matrix at a controlled rate.
2. (Previously presented) The liquid adhesive of claim 1, wherein the cyanoacrylate comprises butyl cyanoacrylate.
3. (Previously presented) The liquid adhesive of claim 1, wherein the cyanoacrylate comprises octyl cyanoacrylate.
4. (Previously presented) The liquid adhesive of claim 1, wherein the defect forming agent comprises a hydrophilic polymer.
5. (Previously presented) The liquid adhesive of claim 4, wherein the hydrophilic polymer comprises polyethylene glycol.
6. (Previously presented) The liquid adhesive of claim 5, wherein the polyethylene glycol has an average molecular weight of about 600.
7. (Canceled)
8. (Previously presented) The liquid adhesive of claim 1, wherein the therapeutic agent further comprises a component selected from the group consisting of anti-inflammatory agents, anti-infective agents, immunosuppressive agents, and anesthetic agents.
9. (Canceled)
10. (Previously presented) The liquid adhesive of claim 1, further comprising a water-soluble acidic antidegradation agent.
11. (Previously presented) The liquid adhesive of claim 10, wherein the water-soluble acidic antidegradation agent comprises Vitamin C.
12. (Currently amended) A method of sealing a wound, the method comprising the steps of:
approximating the wound;

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applying a stable liquid adhesive comprising a liquid mixture of a cyanoacrylate, a therapeutic agent comprising an antibiotic encapsulated in a microcapsule, and a water soluble defect forming agent to a tissue surface surrounding the wound; and

curing the adhesive, whereby the wound is sealed.

13. (Previously presented) The method of claim 12, further comprising the steps of: removing the defect forming agent from the cured adhesive by solvating the defect forming agent in a body fluid; and

delivering the therapeutic agent to the tissue surface beneath the cured adhesive via defects formed by removal of the defect forming agent.

14. (Previously presented) The method of claim 12, wherein the cyanoacrylate comprises butyl cyanoacrylate.

15. (Previously presented) The method of claim 12, wherein the cyanoacrylate comprises octyl cyanoacrylate.

16. (Original) The method of claim 12, wherein the defect forming agent comprises a hydrophilic polymer.

17. (Original) The method of claim 16, wherein the hydrophilic polymer comprises polyethylene glycol.

18. (Original) The method of claim 17, wherein the polyethylene glycol has an average molecular weight of about 600.

19. (Canceled)

20. (Previously presented) The method of claim 12, wherein the therapeutic agent further comprises a component selected from the group consisting of anti-inflammatory agents, anti-infective agents, immunosuppressive agents, and anesthetic agents.

21. (Canceled)

22. (Original) The method of claim 12, wherein the wound comprises a skin laceration.

23. (Previously presented) The method of claim 12, wherein the liquid adhesive further comprises a water-soluble acidic antidegradation agent.

24. (Original) The method of claim 23, wherein the water-soluble acidic antidegradation agent comprises Vitamin C.

25. (Canceled)

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26. (Currently amended) The liquid adhesive of claim 1, wherein the microcapsule comprises a gelatin microcapsule.

27. (Previously presented) The liquid adhesive of claim 1, wherein the antibiotic comprises gatifloxacin.

28. (Previously presented) The liquid adhesive of claim 1, wherein the antibiotic comprises Penicillin G.

29. (Previously presented) The liquid adhesive of claim 1, wherein the antibiotic comprises Sulfanilamide.

30. (Canceled)

31. (Currently amended) The method of claim 12, wherein the microcapsule comprises a gelatin microcapsule ~~envelopes the antibiotic~~.

32. (Previously presented) The method of claim 12, wherein the antibiotic comprises gatifloxacin.

33. (Previously presented) The method of claim 12, wherein the antibiotic comprises Penicillin G.

34. (Currently amended) The method of claim 12, wherein the antibiotic comprises Sulfanilamide.